

## AMENDMENTS TO THE CLAIMS

1           1. (Currently Amended) A document-generation process performed using a  
2 computer system, the process comprising:  
3        parsing a raw document to create an internal representation of the document;  
4        reading a first first-level transform from a transform database;  
5        applying the first first-level transform to the internal representation ~~so as~~ to create  
6            a first first-level document;  
7        writing the first first-level document to memory;  
8        reading a second first-level transform from the transform database;  
9        applying the second first-level transform to the internal representation to create a  
10           second first-level document;  
11        receiving a first request for a second-level document that depends from the first  
12           first-level document;  
13        in response to the first request, reading a second-level transform from the  
14           transform database;  
15        in response to the first request, applying the second-level transform to the first  
16           first-level document ~~so as~~ to create [[a]] the second-level document; ~~and~~  
17        writing the second-level document to memory; and  
18        writing the second first-level document to memory;  
19        wherein the first first-level document and the second first-level document are  
20           different.

1           2. (Currently Amended) A document-generation process as defined in Claim  
2 1, further comprising:  
3        revising the raw document;  
4        applying the first first-level transform to the revised raw document ~~so as~~ to create  
5           a revised first first-level document;  
6        writing the revised first first-level document to memory; and  
7        indicating that a then-existing second-level document is invalid.

1           3. (Original) A document-generation process as defined in Claim 2,  
2 further comprising:  
3           receiving a second request for the then-existing second-level document;  
4           determining that the then-existing second-level document has been indicated  
5           invalid;  
6           applying the second-level transform to the revised first first-level document ~~so as~~  
7           to create a revised second-level document; and  
8           writing the revised second-level document to memory.

1           4. (Currently Amended) A document-generation process as defined in Claim  
2, further comprising:  
3           receiving a request for a revised first first-level transform;  
4           revising the then-existing first first-level transform;  
5           applying the revised first first-level transform to the raw document ~~so as~~ to create  
6           a revised first first-level document;  
7           writing the revised first first-level document to memory; and  
8           indicating that the then-existing second-level document is invalid.

1           5. (Currently Amended) A document-generation process as defined in Claim  
2, further comprising:  
3           receiving a second request for the then-existing second-level document;  
4           determining that the then-existing second-level document has been indicated  
5           invalid;  
6           applying the second-level transform to the revised first first-level document ~~so as~~  
7           to create a revised second-level document; and  
8           writing the revised second-level document to memory.

1           6. (Original) A document-generation process as defined in Claim 1,  
2 wherein a respective GID is assigned to each of the first-level document and the second-  
3 level document.

1           7. (Currently Amended) A document-generation process as defined in Claim  
2 1, wherein the first first-level document and the second-level document are timestamped  
3 and wherein a document is deleted when a timestamp indicates that the document is stale.

1           8. (Currently Amended) A method of generating customized versions of a  
2 document using a computer system, the method comprising:

3           storing the document in raw form;

4           parsing the document to create an internal representation of the document;

5           receiving a request to generate a second-level document; and

6           decomposing the document to create the second-level document, wherein

7           decomposing the document comprises;

8           applying a first first-level transform to the internal representation of the

9           document ~~so as~~ to create a first first-level document; [[and,]] and

10          in response to the request to generate the second-level document, applying

11          a second-level transform to the first first-level document ~~so as~~ to

12          create the second-level document; and

13          decomposing the document to create a second first-level document, wherein

14          decomposing the document to create the second first-level document

15          comprises:

16          applying a second first-level transform to the internal representation of the

17          document to create a second first-level document;

18          wherein the first first-level document and the second first-level document are

19          different.

1           9. (Currently Amended) A method as defined in Claim 8, wherein applying

2 a first first-level transform and applying a second-level transform comprises applying

3 sequential transforms to the document.

1           10. (Canceled)

1           11. (Canceled)

1           12. (Currently Amended) A method as defined in Claim 8, wherein  
2 decomposing the document comprises applying a third-level transform to the second  
3 level document ~~so as~~ to create a third-level document.

1           13. (Original) A method as defined in Claim 8, wherein the document is  
2 stored in raw XML form.

1           14. (Currently Amended) A method as defined in Claim 13, wherein applying  
2 a first first-level transform and applying a second-level transform comprises applying  
3 sequential transforms to the document.

1           15. (Currently Amended) A method as defined in Claim 14, wherein applying  
2 a first first-level transform of the document stored in raw XML form comprises applying  
3 a subscription-level transform to the internal representation of the document ~~so as~~ to  
4 create a subscription-level document.

1           16. (Previously Presented) A method as defined in Claim 15, wherein  
2 the subscription-level transform enables content filtering of the internal representation in  
3 accordance with a user's request.

1           17. (Currently Amended) A method as defined in Claim 16, wherein applying  
2 a second-level transform comprises applying an organization-level transform to the  
3 subscription-level document ~~so as~~ to create an organization-level document.

1           18. (Original) A method as defined in Claim 17, wherein the  
2 organization-level transform enables subscription-specific content filtering of a  
3 subscription-level document.

1           19. (Currently Amended) A method as defined in Claim 18, wherein  
2 decomposing the document comprises applying a presentation-level transform to the  
3 organization-level document ~~so as~~ to create a presentation-level document.

1           20. (Original) A method as defined in Claim 19, wherein the presentation-  
2 level transform generates an organization-specific document for end user presentation.

1           21. (Original) A method as defined in Claim 20, wherein the presentation-  
2 level transform generates an HTML document or a text file for end user presentation.

3           22. (Original) A method as defined in Claim 21, wherein the subscription-  
4 level transform is mandatory and the organization-level and presentation-level transforms  
5 are optional.

1           23. (Original) A method as defined in Claim 8, wherein a transform is  
2 applied to a document only as a result of an initial demand for a transformed document.

1           24. (Original) A method as defined in Claim 23, wherein the demand for a  
2 transformed document is a client request.

1           25. (Original) A method as defined in Claim 24, wherein the demand for a  
2 transformed document is a document publication process.

1           26. (Original) A method as defined in Claim 23, wherein transformed  
2 documents are written to a cache.

1           27. (Original) A method as defined in Claim 26, wherein demands for a  
2 transformed document, subsequent to the initial demand, are referred to the cache.

1           28. (Currently Amended) A computer readable medium having data stored  
2 therein to cause a data processing system to generate a data document according to a  
3 process comprising:  
4           storing a raw form of the document;  
5           parsing the document to create an internal representation of the document; and

6 receiving a request from a client computer system coupled to the data processing  
7 system to generate a second-level document into a particular form;  
8 decomposing the document into the form requested by the client system, wherein  
9 decomposing the document comprises;  
10 applying a first first-level transform to the internal representation of the  
11 document ~~so as~~ to create a first first-level document; [[and,]] and  
12 in response to the request to generate the second-level document, applying  
13 a second-level transform to the first first-level document ~~so as~~ to  
14 create the second-level document; and  
15 decomposing the document to create a second first-level document, wherein  
16 decomposing the document to create the second first-level document  
17 comprises:  
18 applying a second first-level transform to the internal representation of the  
19 document to create a second first-level document;  
20 wherein the first first-level document and the second first-level document are  
21 different.

1 29. (Currently Amended) A computer readable medium as defined in Claim  
2 28, wherein applying a first first-level transform and applying a second-level transform  
3 comprises applying sequential transforms to the document.

1 30. (Previously Presented) A computer readable medium as defined in  
2 Claim 28, wherein the document is stored in XML form.

1 31. (Previously Presented) A computer readable medium as defined in  
2 Claim 30, wherein the document stored in XML form is parsed by an XML parser to  
3 create the internal representation.

1 32. (Previously Presented) A computer readable medium as defined in  
2 Claim 31, wherein the internal representation level of the document is transformed to a  
3 subscription-level document by applying a subscription-level transform to the internal  
4 representation.

1           33. (Currently Amended) A computer readable medium as defined in Claim  
2       32, wherein application of the subscription level transform to the internal representation  
3       so-as to create a subscription-level document is required.

1           34. (Previously Presented)      A computer readable medium as defined in  
2       Claim 32, wherein the subscription-level document is transformed into an organization-  
3       level document by applying an organization-level transform to the subscription-level  
4       document.

1           35. (Previously Presented)      A computer readable medium as defined in  
2       Claim 34, wherein application of the organization-level transform to the subscription-  
3       level document so-as to create an organization-level document is optional.

1           36. (Previously Presented)      A computer readable medium as defined in  
2       Claim 34, wherein the internal representation of the document is decomposed to a  
3       transform-level document only in response to a request for a transform-level document.

1           37. (Previously Presented)      A computer readable medium as defined in  
2       Claim 36, wherein transformed documents are written to a cache.

1           38. (Previously Presented)      A computer readable medium as defined in  
2       Claim 37, wherein an initial request for a transformed document causes decomposition of  
3       the internal representation into the form requested and wherein subsequent requests for a  
4       transformed document causes the transformed document to be retrieved from memory.

1           39. (Previously Presented)      A computer readable medium as defined in  
2       Claim 29, wherein the data document is generated according to a process comprising:  
3           tracking the dependencies of a transformed document; and  
4           regenerating the transformed document when any dependency related to the  
5           document changes.

1           40. (Previously Presented)       A computer readable medium as defined in  
2   Claim 39, wherein the document is generated according to a process comprising:  
3           designating a cached version of the document invalid when any dependency  
4           related to the document changes, and  
5           regenerating the transformed document in response to a request for the document  
6           that is made after the dependency change.

1           41. (Previously Presented)       A computer readable medium as defined in  
2   Claim 40, wherein the document is stored in XML form.

1           42. (Previously Presented)       A computer readable medium as defined in  
2   Claim 39, wherein the document stored in XML form is parsed by an XML parser to  
3   create the internal representation.

1           43. (Previously Presented)       A computer readable medium as defined in  
2   Claim 42, wherein the internal representation level of the document is transformed to a  
3   subscription-level document by applying a subscription-level transform to the internal  
4   representation.

1           44. (Previously Presented)       A computer readable medium as defined in  
2   Claim 43, wherein application of the subscription level transformed to the internal  
3   representation **so as** to create a subscription-level document is required.

1           45. (Previously Presented)       A computer readable medium as defined in  
2   Claim 43, wherein the subscription-level document is transformed into an organization-  
3   level document by applying an organization-level transform to the subscription-level  
4   document.

1           46. (Previously Presented)       A computer readable medium as defined in  
2   Claim 45, wherein application of the organization-level transform to the subscription-  
3   level document **so as** to create an organization-level document is optional.

1           47. (Previously Presented) A computer readable medium as defined in  
2 Claim 45, wherein the internal representation of the document is decomposed to a  
3 transform-level document only in response to a request for a transform-level document.

1           48. (Previously Presented) A computer readable medium as defined in  
2 Claim 47, wherein transformed documents are written to a cache.

1           49. (Canceled)

1           50. (Canceled)

1           51. (Canceled)

1           52. (Canceled)

1           53. (Currently Amended) A method of generating customized versions of a  
2 document using a computer system, the method comprising:

3           storing the document in a primitive form;

4           transforming the document from primitive form into an internal representation of  
5           the document;

6           transforming the internal representation into at least one subscription level a first  
7           first-level document[[,]] and into a DEFAULT organization level second  
8           first-level document and into at least one user-specific organization level  
9           document;

10          transforming the DEFAULT organization level first first-level document into at  
11          least one presentation level first second-level document; and

12          transforming the user-specific organization level second second-level document  
13          into at least one presentation level second second-level document;  
14          wherein the first first-level document and the second first-level document are  
15          different.

1           54. (Currently Amended) A method of generating customized versions of  
2 documents as defined in Claim [[53]] 71, wherein the user-specific organization-level  
3 document is transformed into at least two presentation-level documents.

1           55. (Original) A method of generating customized versions of documents  
2 as defined in Claim 54, wherein the user-specific organization-level document is  
3 transformed into an HTML presentation-level document and into a FLAT presentation-  
4 level transform.

1           56. (Currently Amended) A method of generating customized versions of a  
2 document as defined in Claim [[53]] 71, wherein:  
3           (i) the internal representation is transformed into a first subscription-level  
4                 document and into a second subscription-level document;  
5           (ii) the first subscription level document is transformed into a subscription-level  
6                 specific DEFAULT organization-level document and into at least one  
7                 user-specific organization-level document; and  
8           (iii) the second organization-level document is transformed into a subscription-  
9                 level-specific DEFAULT organization-level document.

1           57. (Original) A method of generating customized versions of a document  
2 as defined in Claim 56, wherein the document is stored in XML form.

1           58. (Currently Amended) A system for the generation of customized data  
2 documents, the system comprising:  
3           first database for storing raw data documents;  
4           first tabular means for storing document records;  
5           an interface coupling the first database to the first tabular means;  
6           a request interface to receive a document generation request, wherein the  
7                 document generation request indicates a particular document type;  
8           a second database for storing a compilation of transforms that enable an internal  
9                 representation of a document to be transformed into a first first-level

10           document and into a second first-level document and that enable the first  
11           first-level document to be transformed into a second-level document,  
12           wherein each transform is mapped to a particular document type;  
13           a document generator, coupled to the first and second databases and first and  
14           second tabular means, and to the request interface, to generate the first  
15           first level first-level document using at least one of the transforms, to  
16           generate the second first-level document using at least one of the  
17           transforms that is different than at least one of the transforms used to  
18           generate the first-level document, and to generate the second-level  
19           document using at least one of the transforms in response to receipt of the  
20           document generation request, wherein the document type of the second-  
21           level document and the transform used to generate the second-level  
22           document are indicated by the document generation request;  
23           second tabular means for storing transform records; and  
24           an interface coupling the second database to the second tabular means; and  
25           wherein the first first-level document and the second first-level document are  
26           different.

1           59. (Original) A system as defined in Claim 58, further comprising:  
2           a cache coupled to the first tabular means and to the second tabular means.

1           60. (Currently Amended) A system as defined in Claim 58, wherein the  
2           second database stores a compilation of transforms that enable:  
3           transforming an internal representation into at least one subscription-level  
4           document, into a DEFAULT organization-level document and into at least  
5           one user-specific organization-level document;  
6           transforming the DEFAULT organization-level document into at least one  
7           presentation-level document; and  
8           transforming the user-specific organization-level document into at least one  
9           presentation-level document.

1           61. (Previously Presented) A system as defined in Claim 60, wherein  
2 the second database stores a compilation of transforms that enable:  
3           (i) the internal representation to be transformed into a first subscription-level  
4               document and into a second subscription-level document;  
5           (ii) the first subscription level document to be transformed into a subscription-  
6               level specific DEFAULT organization-level document and into at least  
7               one user-specific organization-level document; and  
8           (iii) the second organization-level document to be transformed into a subscription-  
9               level-specific DEFAULT organization-level document.

1           62. (Original) A system as defined in Claim 61, further comprising:  
2 a cache coupled to the first tabular means and to the second tabular means.

1           63. (Previously Presented) A document-generation process as defined in  
2 Claim 1 wherein receiving a first request for a second-level document that depends from  
3 the first-level document comprises:  
4           receiving a first request from a client computer coupled to the computer system  
5               for a second-level document that depends from the first-level document

1           64. (Currently Amended) A document-generation process as defined in Claim  
2 further comprising:  
3           tracking the dependencies of a transformed document, wherein the transformed  
4               document includes at least one [[or]] of the first first-level document and  
5               the second-level document and the dependencies include the first first-  
6               level document and the internal representation; and  
7           regenerating the transformed document when any dependency related to the  
8               document changes.

1           65. (Previously Presented) A method of generating customized versions of a  
2 document using a computer system as defined in Claim 8 wherein receiving a request to  
3 generate a second-level document comprises:

4 receiving a request from a client computer coupled to the computer system to  
5 generate a second-level document.

1 66. (Currently Amended) A method of generating customized versions of a  
2 document using a computer system as defined in Claim 8 further comprising:  
3 tracking the dependencies of a transformed document, wherein the transformed  
4 document includes at least one [[or]] of the first first-level document and  
5 the second-level document and the dependencies include the first first-  
6 level document and the internal representation; and  
7 regenerating the second-level document when any dependency related to the  
8 transformed document changes.

1 67. (Currently Amended) A method of generating customized versions of a  
2 document using a computer system as defined in Claim [[53]] 71 wherein receiving a  
3 request to generate a second-level document comprises:  
4 receiving a request from a client computer coupled to the computer system to  
5 generate [[a]] the second-level document.

1 68. (Currently Amended) A method of generating customized versions of a  
2 document using a computer system as defined in Claim [[53]] 71 further comprising:  
3 tracking the dependencies of the transformed documents, wherein the transformed  
4 documents include the subscription-level document, the DEFAULT  
5 organization-level document, the user-specific organization-level  
6 document, the presentation-level documents, and the dependencies include  
7 the DEFAULT organization-level document, the user-specific  
8 organization-level document, and the internal representation; and  
9 regenerating the second-level document when any dependency related to the  
10 transformed document changes.

1 69. (Currently Amended) A method of generating customized versions of a  
2 document using a computer system as defined in Claim [[53]] 71 wherein receiving a  
3 request to generate a second-level document comprises:

4 receiving a request from a client computer coupled to the computer system to  
5 generate [[a]] the second-level document.

1 70. (Currently Amended) A system for the generation of customized data  
2 documents as defined in Claim 58 further comprising:  
3 a document dependency tracker and regenerator, coupled to the first and second  
4 databases and first and second tabular means, to track the dependencies of  
5 a transformed document, wherein the transformed document includes at  
6 least one or the first-level document and the second-level document and  
7 the dependencies include the first-level document and the internal  
8 representation and to regenerate the transformed document when any  
9 dependency related to the document changes.

1 71. (New) A method of generating customized versions of documents as in  
2 Claim 53, wherein the first-level document comprises a subscription-level document and  
3 the second first-level document comprises a DEFAULT organization-level document,  
4 wherein:

5 transforming the internal representation further comprises:  
6 transforming the internal representation into at least one subscription-level  
7 document, into a DEFAULT organization-level document and into  
8 at least one user-specific organization-level document;

9 transforming the first first-level document further comprises:  
10 transforming the DEFAULT organization-level document into at least one  
11 presentation-level document; and  
12 the method further comprises:  
13 transforming the user-specific organization-level document into at least  
14 one presentation-level document.

1 72. (New) A document-generation process performed using a computer  
2 system, the process comprising:  
3 parsing a raw document to create an internal representation of the document;  
4 reading a first first-level transform from a transform database;

5 applying the first first-level transform to the internal representation to create a  
6 first first-level document;  
7 writing the first first-level document to memory;  
8 reading a second first-level transform from the transform database;  
9 applying the second first-level transform to the internal representation to create a  
10 second first-level document;  
11 reading a second-level transform from the transform database;  
12 applying the second-level transform to the first first-level document to create a  
13 second-level document;  
14 writing the second-level document to memory; and  
15 writing the second first-level document to memory;  
16 wherein the first first-level document and the second first-level document are  
17 different.

1 73. (New) A computer readable medium comprising data stored therein to  
2 cause a data processing system to:  
3 read a first first-level transform from a transform database;  
4 apply the first first-level transform to the internal representation to create a first  
5 first-level document;  
6 write the first first-level document to memory;  
7 read a second first-level transform from the transform database;  
8 apply the second first-level transform to the internal representation to create a  
9 second first-level document;  
10 read a second-level transform from the transform database;  
11 apply the second-level transform to the first first-level document to create a  
12 second-level document;  
13 write the second-level document to memory; and  
14 write the second first-level document to memory;  
15 wherein the first first-level document and the second first-level document are  
16 different.